

# IDAHO

## DEPARTMENT OF FISH AND GAME

**Jerry M. Conley, Director**

CLARK FORK HATCHERY

Annual Report



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by

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## CLARK FORK HATCHERY ABSTRACT

During November, December and January, 1982-83, we spawned kokanee at the Sullivan Springs kokanee trap. The spawning crew consisted of personnel from the three northern hatcheries plus recruits from various hatcheries statewide. There were 11,432,900 kokanee eggs taken and split among the three northern hatcheries, with approximately 960,000 going to Montana.

The number of eggs taken this year was comparable to that of last year. There were approximately 115,800 fish handled and counted. Next year's run is expected to be about 50% smaller in numbers.

This year 115,188 eggs were taken from the hatchery kamloop broodstock. These eggs achieved an average eye-up of 90% and then were shipped to the Sandpoint Hatchery. Also, there were approximately 75,000 eggs taken from wild kamloop caught by hook and line in the Clark Fork River. We got an 85% average eye-up on these eggs and they also went to Sandpoint. After spawning, the domestic brood fish were planted in Kelso Lake.

During May and June 748,334 eggs were taken from our three- and four-year-old Kings Lake cutthroat broodstock. 14,927 eggs were taken from Kerr Lake cutthroat. We had an average eye-up of 60% on the three- and four-year-old Kings Lake cutthroat and 73% on the Kerr Lake eggs. The 4+ males were planted following the spawning period.

From April through September we planted 14,437 pounds or 50,735 catchable rainbow transferred from the Nampa and Hagerman hatcheries. During the same period we planted 379,603 cutthroat fingerlings in Priest Lake, 480 4+ male cutthroat broodstock in Jewel Lake, 145 kamloop broodstock in Kelso Lake, 132, 490 kamloop fingerling to Hayden Lake and 2,320 to Roman Nose #3. We planted 2,621,784 kokanee fry this year.

The hatchery crew assisted with mid-lake kokanee plants on Priest Lake. Help in the form of strong backs were provided to plant some mountain lakes with Bill Carter in September.

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## OBJECTIVES

The objectives of the Clark Fork Hatchery are:

1. Rear cutthroat broodstock.
2. Spawn, rear and distribute trout and kokanee salmon to waters on Region 1.
3. Redistribute catchable rainbow trout reared at Hagerman, Nampa, etc. into streams, lakes, and reservoirs of Region 1.

## INTRODUCTION

Clark Fork Hatchery is located approximately 1.7 miles north of the town of Clark Fork on Spring Creek Road. It receives its water supply from Spring Creek and requires 8 cfs of water to operate. The hatchery has four large raceways: 12' x 319', three sections per raceway, approximately 2,470 cubic feet per section. With all four in operation, we have a flow of 1.45 cfs per pond. We have two medium sized raceways: 6' x 116'; six small raceways measuring 6' x 53' or 540 cubic foot capacity per pond with a possible flow of .33 cfs. We have four earth brood ponds, 3 sections each with 2,202 cubic feet per section and flow of 1.5 cfs per pond. In the hatchery building there are ten concrete vats of 60.5 cubic feet each and .12 cfs each; there are seventeen fiberglass troughs of 16.6 cubic feet each and .025 cfs. The hatchery is capable of raising 40,000 pounds of fish and producing 5,000,000 eggs at capacity. Our water flow fluctuates from 11 cfs to a low of 3 cfs during late summer resulting in less than full production capabilities. In addition to the hatchery, there is a kokanee trapping facility located at Sullivan Springs on Granite Creek approximately 30 miles from the hatchery. This facility could possibly produce 10 to 12 million eggs annually.

## FISH PRODUCTION

### Kokanee: (late spawning)

Green eggs	11,432,900	
Eyed eggs	3,783,011	(at Clark Fork)
Shipped	2,555,602	(green eggs to Sandpoint)
Shipped	3,973,290	(green eggs to Mullan)
Shipped	380,598	(eyed eggs to Mullan)
Shipped	958,088	(green eggs to Montana)
Shipped	9,972	(eyed eggs to U.S.F.W.S.)
Eye-up %	92.9%	(at Clark Fork)
Planted	2,621,784	(Priest and Pend Oreille Lakes)

### Kings Lake Cutthroat - 4 yr.

Green eggs	513,162
Eyed eggs	312,390
Eye-up %	61%

### Kings Lake Cutthroat - 3 yr.

Green eggs	235,172
Eyed eggs	137,562
Eye-up %	58.4%

### Kerr Lake Cutthroat

Green eggs	14,927
Eyed eggs	10,879
Eye-up %	73%

### Domestic Kamloop Broodstock

Green eggs	115,188
Eyed eggs	104,172
Eye-up %	90.4% (shipped to Sandpoint)

### Wild Kamloop

Green eggs	75,204
Eyed eggs	63,900
Eye-up %	85% (shipped to Sandpoint)

### Fish on Hand as of 10-1-83

3+ cutthroat	2,636	(broodstock)
2+ cutthroat	5,500	(future broodstock)
1+ cutthroat	4,050	(future broodstock)
1+ cutthroat	299,038	(holdovers)
0+ cutthroat	530,313	(holdovers)
0+ cutthroat	9,211	(future broodstock)

## FISH HEALTH

Fish health was generally fair for the season with only a couple of exceptions. First, 282,760 kamloop fingerling were received from Hagerman. These fish had IHN and we lost 53% prior to stocking. We had the usual post-spawning mortality in our cutthroat broodstock, and we planted the 4+ males following the spawning season. We had a light loss due to IPN. An outbreak of Epithelial Cystis coupled with Myxo bacteria required a 14-day 3% TM-50 feed treatment and a 3-day 2 ppm. Benzalkonium Chloride treatment. Cutthroat fry received from McCall were in poor condition from nutritional gill; they also contracted Epithelial Cystis and sun-burn. These problems were diagnosed by Joe Lientz at the Dworshak disease lab; after consultation with Harold Ramsey, treatments were administered and the fish started showing improvement.

The cutthroat were treated for various internal and external bacteria throughout the year.

Fry samples were sent to the Fish Cultural Development Center at Bozeman, Montana, Joe Lientz at Dworshak, and Rangen's Research Center, and as of yet, no IPN confirmed. All of the fish on hand appear to be in good health at the year's end.

## FISH TRANSFERS

There were no fish transferred from Clark Fork Hatchery.

Fish received from transfer:

Approx. 282,000 kamloop fingerling from Hagerman  
63,000 rainbow catchables from Hagerman and Nampa  
148,950 Fish Lake cutthroat fry from McCall

## HATCHERY IMPROVEMENTS

The old trailer (crew quarters) was removed and sold at public auction. New living room carpet was installed in residences 1 and 3. The shop was repainted and several pieces of new equipment were acquired including: Toro self-propelled mower, Sears 20 hp tractor with mower deck and snow blower attachments, and a Meyers pickup mounted snow plow blade.

# FISH RELEASES

Species	Number	Lbs.	Location
RBT catchable	50,735	14,437	Lowland lakes and streams
CTT fingerlings	379,603	10,382	Priest Lake
CTT broodstock	480	480	Jewel Lake
CTT fry	10,500	3	Granite Cr. (Priest
Kamloop fingerling	134,810	2,840	Hayden Lake
Kamloop broodstock	145	380	Kelso Lake
Kokanee fry	2,621,784	2,821	Priest and Pend Oreille lakes
TOTALS	3,198,057	31,343	

# SPAWNTAKING OPERATIONS

## At Clark Fork Hatchery:

Westslope cutthroat ..... 513,162 @ 351/oz. (4 yr.)  
 Westslope cutthroat ..... 235,172 @ 454/oz. (3 yr.)  
 Kerr Lake cutthroat ..... 14,927 @ 253/oz.  
 Domestic Kamloop ..... 115,188 @ 210/oz.  
 Wild Kamloop ..... 75,204 @ 144/oz.

## At Sullivan Springs:

Late Kokanee ..... 11,432,900 @ 283/oz.

# FISH FEED UTILIZED

Type	Size	Lbs.	Cost
Dry	5/32	300	\$ 69.57
Moist (all types)	all sizes	27,780	10,849.91
TOTAL		28,080	\$10,919.48

## MISCELLANEOUS

The water level dropped again this summer, but due to lighter than normal fish loading, we experienced no serious problems. Gene McPherson transferred in from Henry's Lake to replace Gary Baker who transferred to the American Falls Hatchery.

## HATCHERY NEEDS

We still need a new pipeline from the spring to the hatchery building. We need a valve in the above mentioned pipeline to divert water for incubator room use only. We need new plumbing inside of the incubator room also. High and low water alarms are needed on all water supplies. A new concrete head box at the city water pond is needed. Concrete piers and aluminum screen needs to be installed at the supply pond at the hatchery. The brood ponds need concrete walls and new gravel in the bottoms. The railing on the entrance road is rotten and needs to be replaced before the next tourist season.

## ACKNOWLEDGEMENTS

Hatchery Staff for the fish year included:

Gary Baker, Superintendent II  
Gene McPherson, Superintendent II  
Alan Williams, Superintendent I  
Bruce Thompson, Fish Culturist  
Kelli Goss, Laborer  
Lois Butler, CETA